

aramid, polypropylene, polyester, and combinations of filaments of graphite, carbon, aramid, polypropylene, and polyester;

(b) orienting said fibers substantially in the longitudinal axis;

(c) contacting said fibers with a resorcinol modified phenolic resin binder;

(d) pultruding said fibers and binder into a synthetic wood article;

(e) curing the resorcinol modified phenolic resin binder after said pultruding step, wherein said curing the resorcinol modified phenolic resin binder step is auto-catalyzed; and

(f) oxidative treating said synthetic wood article.

3. (Amended) A process as set forth in Claim 1 further comprising cutting said synthetic wood material in the shape of a wood board, plank, or strip.

4. (Amended) A process as set forth in Claim 1 wherein said oxidative treating comprises flame treatment for restoring color.

U.S. Serial No.: 09/755,778
Group Art Unit: 1771

8. (Amended) A process as set forth in Claim 1 wherein said aramid fibers are composed of Kevlar aramid fibers.

9. (Amended) A process as set forth in Claim 1 wherein said fibers can be co-mixed with ceramic fibers.

10. (Amended) A process as set forth in Claim 8 wherein said fibers are sized in the range of about $80-100 \times 10^{-5}$ inches in diameter.

11. (Amended) A process as set forth in Claim 1 wherein said pultruding comprises pultruding to produce a pultruded article which is substantially porosity free.

12. (Amended) A process as set forth in Claim 8 wherein said fibers are formed in bundles containing a number of fibers in the range of 100 to 5000.

14. (Amended) A passivation treated synthetic wood material comprising:

(a) a plurality of continuous glass fibers oriented substantially in the longitudinal axis;

(b) a resorcinol modified phenolic resin binding said fibers to form a synthetic wood material, wherein said synthetic wood article has been oxidative treated to restore color; and

(c) wherein said synthetic wood article is formed by the process of providing a plurality of continuous glass fibers oriented substantially in the longitudinal axis; contacting said fibers with a resorcinol modified phenolic resin binder; pultruding said fibers and binder into a synthetic wood article; curing the resorcinol modified phenolic resin binder after said pultruding step, wherein said curing the resorcinol modified phenolic resin binder step is auto-catalyzed; and oxidative treating said synthetic wood article.

15. (Amended) A passivation treated synthetic wood material as set forth in Claim 14 wherein said synthetic wood material is in the form of a pultruded cylinder, log, rectangle, or square cut into lengths of about 0.125 inches to 12 inches.

16. (Amended) A passivation treated synthetic wood material as set forth in Claim 15 wherein said synthetic wood article has been oxidative treated by flame treatment to restore color.

17. (Amended) A passivation treated synthetic wood material as set forth in Claim 14 wherein said fibers are E glass fibers co-mixed with carbon, aramid, or ceramic fibers or mixtures thereof.

18. (Amended) A passivation treated synthetic wood material as set forth in Claim 14 wherein said fibers are formed into bundles.

19. (Amended) A passivation treated synthetic wood material as set forth in Claim 14 wherein said fibers are sized in the range of about $80-100 \times 10^{-5}$ inches in diameter.

20. (Amended) A process for forming a synthetic wood material, comprising:

(a) providing a plurality of continuous fibers selected from the group consisting of the filaments of graphite, carbon, aramid, polypropylene, polyester, and combinations of filaments of graphite, carbon, aramid, polypropylene, and polyester sized in the range of about $80-100 \times 10^{-5}$ inches in diameter and oriented substantially in the longitudinal axis;